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October 26, 2018

VIA ELECTRONIC FILING

The Honorable Jocelyn G. Boyd
Chief Clerk/Administrator
Public Service Commission of South Carolina
101 Executive Center Drive, Suite 100
Columbia, South Carolina 29210

Re: **Duke Energy Progress, LLC – Monthly Fuel Report**
Docket No. 2006-176-E

Dear Ms. Boyd:

Pursuant to the Commission's Orders in Docket No. 1977-354-E, enclosed for filing is Duke Energy Progress, LLC's Monthly Fuel Report in Docket No. 2006-176-E for the month of September 2018.

Should you have any questions regarding this matter, please do not hesitate to contact me at 803-988-7130.

Sincerely,

A handwritten signature in blue ink, appearing to read "Rebecca Dulin", written in a cursive style.

Rebecca J. Dulin

Enclosure

cc: Service List

**Duke Energy Progress
Summary of Monthly Fuel Report**

Schedule 1

Line No.	Item	September 2018
1	Fuel and Fuel-related Costs excluding DERP incremental costs	\$ 158,434,642
	MWH sales:	
2	Total System Sales	5,868,522
3	Less intersystem sales	441,128
4	Total sales less intersystem sales	5,427,394
5	Total fuel and fuel-related costs (¢/KWH) (Line 1/Line 4)	2.9192
6	Current fuel & fuel-related cost component (¢/KWH) (per Schedule 4)	2.8087
	Generation Mix (MWH):	
	Fossil (By Primary Fuel Type):	
7	Coal	666,663
8	Oil	2,207
9	Natural Gas - Combustion Turbine	505,453
10	Natural Gas - Combined Cycle	1,581,135
11	Biogas	156
12	Total Fossil	2,755,616
13	Nuclear	1,979,559
14	Hydro - Conventional	50,168
15	Solar Distributed Generation	16,687
16	Total MWH generation	4,802,030

Note: Detail amounts may not add to totals shown due to rounding.

Schedule 2

**Duke Energy Progress
Details of Fuel and Fuel-Related Costs**

<u>Description</u>	<u>September 2018</u>
Fuel and Fuel-Related Costs:	
Steam Generation - Account 501	
0501110 coal consumed - steam	\$ 24,351,327
0501310 fuel oil consumed - steam	295,904
Total Steam Generation - Account 501	<u>24,647,231</u>
Nuclear Generation - Account 518	
0518100 burnup of owned fuel	13,468,704
Other Generation - Account 547	
0547000 natural gas consumed - Combustion Turbine	16,406,706
0547000 natural gas capacity - Combustion Turbine	1,735,174
0547000 natural gas consumed - Combined Cycle	36,650,470
0547000 natural gas capacity - Combined Cycle	8,496,104
0547106 biogas consumed - Combined Cycle	6,196
0547200 fuel oil consumed	219,883
Total Other Generation - Account 547	<u>63,514,533</u>
Purchased Power and Net Interchange - Account 555	
Fuel and fuel-related component of purchased power	60,918,586
Fuel and fuel-related component of DERP purchases	74,363
PURPA purchased power capacity	9,533,487
DERP purchased power capacity	22,269
Total Purchased Power and Net Interchange - Account 555	<u>70,548,705</u>
Less fuel and fuel-related costs recovered through intersystem sales - Account 447	15,182,471
Total Costs Included in Base Fuel Component	\$ 156,996,702
Environmental Costs	
0509030, 0509212, 0557451 emission allowance expense	\$ 2,157
0502020, 0502030, 0502040, 0502080, 0502090, 0548020 reagents expense	1,446,270
Emission Allowance Gains	-
Less reagents expense recovered through intersystem sales - Account 447	2,700
Less emissions expense recovered through intersystem sales - Account 447	7,787
Total Costs Included in Environmental Component	1,437,940
Fuel and Fuel-related Costs excluding DERP incremental costs	<u>\$ 158,434,642</u>
DERP Incremental Costs	239,679
Total Fuel and Fuel-related Costs	<u>\$ 158,674,321</u>

Notes: Detail amounts may not add to totals shown due to rounding.

**DUKE ENERGY PROGRESS
PURCHASED POWER AND INTERCHANGE
SOUTH CAROLINA**

SEPTEMBER 2018

**Schedule 3, Purchases
Page 1 of 2**

Purchased Power	Total	Capacity	Non-capacity		
Marketers, Utilities, Other	\$	\$	mWh	Fuel \$	Non-fuel \$
Broad River Energy, LLC.	\$ 25,485,242	\$ 5,370,034	502,147	\$ 20,115,208	-
City of Fayetteville	1,926,593	790,675	18,724	1,135,918	-
Haywood EMC	29,050	29,050	-	-	-
NCEMC	5,386,528	2,107,579	85,355	3,278,949	-
PJM Interconnection, LLC.	224,376	-	7,169	224,376	-
Southern Company Services	3,549,936	658,634	86,232	2,891,302	-
DE Carolinas - Native Load Transfer	8,462,485	-	209,943	8,461,321	\$ 1,164
DE Carolinas - Native Load Transfer Benefit	201,360	-	-	201,360	-
DE Carolinas - Fees	114,710	-	-	114,710	-
Energy Imbalance	63,395		1,544	58,094	5,301
Generation Imbalance	452		43	276	176
	\$ 45,444,127	\$ 8,955,972	911,157	\$ 36,481,514	\$ 6,641
Act 236 PURPA Purchases					
Renewable Energy	\$ 19,913,026	\$ -	268,896	\$ 19,913,026	\$ -
DERP Qualifying Facilities	96,632	-	1,506	96,632	-
Other Qualifying Facilities	14,057,533	-	194,171	14,057,533	-
	\$ 34,067,191	\$ -	464,573	\$ 34,067,191	\$ -
Total Purchased Power	\$ 79,511,318	\$ 8,955,972	1,375,730	\$ 70,548,705	\$ 6,641

NOTE: Detail amounts may not add to totals shown due to rounding.

DUKE ENERGY PROGRESS
INTERSYSTEM SALES*
SOUTH CAROLINA

SEPTEMBER 2018

Schedule 3, Sales
Page 2 of 2

	Total	Capacity	Non-capacity		
Sales	\$	\$	mWh	Fuel \$	Non-fuel \$
Market Based:					
NCEMC Purchase Power Agreement	\$ 1,257,679	\$ 652,500	15,584	\$ 613,048	\$ (7,869)
PJM Interconnection, LLC.	5,027	-	71	3,085	1,942
Other:					
DE Carolinas - Native Load Transfer Benefit	400,217	-	-	400,217	-
DE Carolinas - Native Load Transfer	15,143,297	-	425,441	14,176,608	966,689
Generation Imbalance	(28)	-	32	-	(28)
Total Intersystem Sales	\$ 16,806,192	\$ 652,500	441,128	\$ 15,192,958	\$ 960,734

* Sales for resale other than native load priority.

NOTE: Detail amounts may not add to totals shown due to rounding.

Duke Energy Progress
(Over) / Under Recovery of Fuel Costs
September 2018

Schedule 4
Page 1 of 3

Line No.			Total Residential	General Service Non-Demand	Demand	Lighting	Total
1	Actual System kWh sales	Input					5,427,393,740
2	DERP Net Metered kWh generation	Input					2,011,329
3	Adjusted System kWh sales	L1 + L2					5,429,405,069
4	Actual S.C. Retail kWh sales	Input	192,472,913	29,398,859	283,057,835	6,430,052	511,359,659
5	DERP Net Metered kWh generation	Input	680,970	27,752	1,302,607		2,011,329
6	Adjusted S.C. Retail kWh sales	L4 + L5	193,153,883	29,426,611	284,360,442	6,430,052	513,370,988
7	Actual S.C. Demand units (kw)	L32 / 31b *100			885,000		
Base fuel component of recovery - non-capacity							
8	Incurred System base fuel - non-capacity expense	Input					\$137,135,304
9	Eliminate avoided fuel benefit of S.C. net metering	Input					\$64,483
10	Adjusted Incurred System base fuel - non-capacity expense	L8 + L9					\$137,199,787
11	Adjusted Incurred System base fuel - non-capacity rate (¢/kWh)	L10 / L3 * 100					2.527
12	S.C. Retail portion of adjusted incurred system expense	L6 * L11 / 100	\$4,880,953	\$743,604	\$7,185,721	\$162,486	\$12,972,764
13	Assign 100 % of Avoided Fuel Benefit of S.C net metering	Input	(\$38,118)	(\$3,521)	(\$22,844)	\$0	(\$64,483)
14	S.C. Retail portion of incurred system expense	L12 + L13	\$4,842,835	\$740,083	\$7,162,877	\$162,486	\$12,908,281
15	Billed base fuel - non-capacity rate (¢/kWh) - Note 1	Input	2.366	2.366	2.366	2.366	2.366
16	Billed base fuel - non-capacity revenue	L4 * L15 /100	\$4,553,503	\$695,577	\$6,697,148	\$152,135	\$12,098,363
17	DERP NEM incentive - fuel component	Input	(\$10,461)	(\$966)	(\$6,269)	\$0	(\$17,696)
18	Adjusted S.C. billed base fuel - non-capacity revenue	L16 + L17	\$4,543,042	\$694,611	\$6,690,879	\$152,135	\$12,080,667
19	S.C. base fuel - non-capacity (over)/under recovery [See footnote]	L18 - L14	\$299,793	\$45,472	\$471,998	\$10,351	\$827,614
20	Adjustment	Input					
21	Total S.C. base fuel - non-capacity (over)/under recovery [See footnote]	L19 + L20	\$299,793	\$45,472	\$471,998	\$10,351	\$827,614
Base fuel component of recovery - capacity							
22a	Incurred base fuel - capacity rates by class (¢/kWh)	L23 / L4 * 100	0.572	0.346			
22b	Incurred base fuel - capacity rate (¢/kW)	L23 / L7 * 100			75		
23	Incurred S.C. base fuel - capacity expense	Input	\$1,100,816	\$101,693	\$659,693		\$1,862,202
24a	Billed base fuel - capacity rates by class (¢/kWh)	Input	0.676	0.426			
24b	Billed base fuel - capacity rate (¢/kW)	Input			88		
25	Billed S.C. base fuel - capacity revenue	L24a * L4 /100	\$1,300,728	\$125,239	\$784,548	\$0	\$2,210,515
26	S.C. base fuel - capacity (over)/under recovery [See footnote]	L25 - L23	(\$199,912)	(\$23,546)	(\$124,855)	\$0	(\$348,313)
27	Adjustment	Input	\$0	\$0	\$0	\$0	\$0
28	Total S.C. base fuel - capacity (over)/under recovery [See footnote]	L26 + L27	(\$199,912)	(\$23,546)	(\$124,855)	\$0	(\$348,313)
Environmental component of recovery							
29a	Incurred environmental rates by class (¢/kWh)	L30 / L4 * 100	0.042	0.025			
29b	Incurred environmental rate (¢/kW)	L30 / L7 * 100			5		
30	Incurred S.C. environmental expense	Input	\$80,087	\$7,398	\$47,995		\$135,480
31a	Billed environmental rates by class (¢/kWh)	Input	0.019	0.008			
31b	Billed environmental rate (¢/kW)	Input			1		
32	Billed S.C. environmental revenue	L31a * L4 /100	\$36,291	\$2,352	\$8,850		\$47,493
33	S.C. environmental (over)/under recovery [See footnote]	L32 - L30	\$43,796	\$5,046	\$39,145	\$0	\$87,987
34	Adjustment	Input					\$0
35	Total S.C. environmental (over)/under recovery [See footnote]	L33 + L34	\$43,796	\$5,046	\$39,145	\$0	\$87,987
Distributed Energy Resource Program component of recovery: avoided costs							
36a	Incurred S.C. DERP avoided cost rates by class (¢/kWh)	L37 / L4 * 100	0.003	0.002			
36b	Incurred S.C. DERP avoided cost rates by class (¢/kW)	L37 / L7 * 100			0.365		
37	Incurred S.C. DERP avoided cost expense	Input	\$5,382	\$497	\$3,226		\$9,105
38a	Billed S.C. DERP avoided cost rates by class (¢/kWh)	Input	0.003	0.001			
38b	Billed S.C. DERP avoided cost rates by class (¢/kW)	Input			0.000		
39	Billed S.C. DERP avoided cost revenue	L38a * L4 /100	\$5,730	\$294	\$0		\$6,024
40	S.C. DERP avoided cost (over)/under recovery [See footnote]	L39 - L37	(\$348)	\$203	\$3,226	\$0	\$3,081
41	Adjustment	Input	\$0	\$0	\$0	\$0	\$0
42	Total S.C. DERP avoided cost (over)/under recovery [See footnote]	L40 + L41	(\$348)	\$203	\$3,226	\$0	\$3,081
43	Total (over)/under recovery [See footnote]	L21 + L28 + L35 + L42	\$143,329	\$27,175	\$389,514	\$10,351	\$570,369

Duke Energy Progress
(Over) / Under Recovery of Fuel Costs
September 2018

Schedule 4
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Year 2018-2019

	Cumulative	Total Residential	General Service Non-Demand	Demand	Lighting	Total
Cumulative (over) / under recovery - BASE FUEL NON-CAPACITY						
Balance ending February 2018	\$23,394,223					
March 2018 - actual	23,722,902	\$105,966	\$14,137	\$203,204	\$5,372	\$328,679
April 2018 - actual	23,109,195	(170,943)	(23,111)	(411,945)	(7,708)	(613,707)
May 2018 - actual	23,830,285	191,924	30,025	488,780	10,361	721,090
June 2018 - actual	25,124,368	428,696	63,626	785,404	16,357	1,294,083
July 2018 - actual	24,946,484	(67,321)	(9,747)	(99,157)	(1,659)	(177,884)
August 2018 - actual	24,050,415	(311,321)	(46,740)	(528,335)	(9,673)	(896,069)
September 2018 - actual	24,878,029	299,793	45,472	471,998	10,351	827,614
_/2 October 2018 - forecast	21,802,104	(901,499)	(152,626)	(1,974,600)	(47,200)	(3,075,925)
_/2 November 2018 - forecast	19,083,525	(837,014)	(131,670)	(1,708,671)	(41,224)	(2,718,579)
_/2 December 2018 - forecast	17,035,153	(748,304)	(89,884)	(1,181,749)	(28,435)	(2,048,372)
_/2 January 2019 - forecast	15,806,562	(516,927)	(49,794)	(646,373)	(15,497)	(1,228,591)
_/2 February 2019 - forecast	14,348,023	(581,562)	(61,606)	(796,238)	(19,133)	(1,458,539)
_/2 March 2019 - forecast	12,441,609	(709,744)	(86,270)	(1,084,341)	(26,059)	(1,906,414)
_/2 April 2019 - forecast	8,847,922	(1,150,562)	(178,242)	(2,212,046)	(52,837)	(3,593,687)
_/2 May 2019 - forecast\	6,713,241	(602,133)	(112,282)	(1,387,182)	(33,084)	(2,134,681)
_/2 June 2019 - forecast	\$5,465,689	(\$400,984)	(\$62,211)	(\$766,130)	(\$18,227)	(\$1,247,552)

Year 2018-2019

	Cumulative	Total Residential	General Service Non-Demand	Demand	Lighting	Total
Cumulative (over) / under recovery - BASE FUEL CAPACITY						
Balance ending February 2018	\$1,622,067					
March 2018 - actual	1,523,528	\$79,187	(\$398)	(\$177,328)	\$0	(\$98,539)
April 2018 - actual	2,089,902	479,717	34,630	52,027	0	566,374
May 2018 - actual	2,445,242	379,717	16,470	(40,847)	0	355,340
June 2018 - actual	2,666,876	217,876	(2,152)	5,910	0	221,634
July 2018 - actual	2,857,544	88,083	(5,454)	108,039	0	190,668
August 2018 - actual	2,709,391	(174,287)	(21,437)	47,571	0	(148,153)
September 2018 - actual	2,361,078	(199,912)	(23,546)	(124,855)	0	(348,313)
_/2 October 2018 - forecast	2,377,186	32,413	(8,013)	(8,292)	0	16,108
_/2 November 2018 - forecast	2,325,223	(17,593)	(4,745)	(29,625)	0	(51,963)
_/2 December 2018 - forecast	1,837,907	(372,900)	(8,663)	(105,753)	0	(487,316)
_/2 January 2019 - forecast	997,845	(805,580)	(15,658)	(18,824)	0	(840,062)
_/2 February 2019 - forecast	360,048	(568,087)	(9,516)	(60,194)	0	(637,797)
_/2 March 2019 - forecast	228,845	(166,399)	11,044	24,152	0	(131,203)
_/2 April 2019 - forecast	502,926	119,328	10,394	144,359	0	274,081
_/2 May 2019 - forecast\	812,538	260,656	5,149	43,807	0	309,612
_/2 June 2019 - forecast	\$747,881	(\$26,033)	(\$2,734)	(\$35,890)	\$0	(\$64,657)

Year 2018-2019

	Cumulative	Total Residential	General Service Non-Demand	Demand	Lighting	Total
Cumulative (over) / under recovery - ENVIRONMENTAL						
Balance ending February 2018	(\$616,504)					
March 2018 - actual	(648,397)	(\$9,388)	(\$802)	(\$21,703)	\$0	(\$31,893)
April 2018 - actual	(646,907)	10,886	939	(10,335)	0	1,490
May 2018 - actual	(644,440)	13,284	519	(11,336)	0	2,467
June 2018 - actual	(578,713)	44,416	3,379	17,932	0	65,727
July 2018 - actual	(485,932)	52,174	4,953	35,654	0	92,781
August 2018 - actual	(331,044)	82,556	8,644	63,688	0	154,888
September 2018 - actual	(243,057)	43,796	5,046	39,145	0	87,987
_/2 October 2018 - forecast	(242,414)	(5,866)	128	6,381	0	643
_/2 November 2018 - forecast	(248,512)	(9,849)	(111)	3,862	0	(6,098)
_/2 December 2018 - forecast	(213,088)	11,304	2,674	21,446	0	35,424
_/2 January 2019 - forecast	17,383	121,347	13,802	95,322	0	230,471
_/2 February 2019 - forecast	208,961	101,144	11,454	78,980	0	191,578
_/2 March 2019 - forecast	212,896	(7,592)	971	10,556	0	3,935
_/2 April 2019 - forecast	184,261	(24,804)	(1,314)	(2,517)	0	(28,635)
_/2 May 2019 - forecast\	192,031	(720)	418	8,072	0	7,770
_/2 June 2019 - forecast	\$245,901	\$24,362	\$3,264	\$26,244	\$0	\$53,870

Year 2018-2019

	Cumulative	Total Residential	General Service Non-Demand	Demand	Lighting	Total
Cumulative (over) / under recovery - DERP AVOIDED COSTS						
Balance ending February 2018	\$2,713					
March 2018 - actual	7,033	\$2,554	\$236	\$1,530	\$0	\$4,320
April 2018 - actual	14,508	4,419	408	2,648	0	7,475
May 2018 - actual	21,181	3,945	364	2,364	0	6,673
June 2018 - actual	23,496	1,368	127	820	0	2,315
July 2018 - actual	26,569	755	189	2,129	0	3,073
August 2018 - actual	36,281	3,500	568	5,644	0	9,712
September 2018 - actual	39,362	(348)	203	3,226	0	3,081
_/2 October 2018 - forecast	40,865	(813)	96	2,220	0	1,503
_/2 November 2018 - forecast	42,181	(895)	102	2,109	0	1,316
_/2 December 2018 - forecast	42,017	(2,374)	98	2,112	0	(164)
_/2 January 2019 - forecast	39,923	(4,232)	81	2,057	0	(2,094)
_/2 February 2019 - forecast	38,905	(3,213)	96	2,099	0	(1,018)
_/2 March 2019 - forecast	38,715	(2,451)	99	2,162	0	(190)
_/2 April 2019 - forecast	39,837	(1,272)	103	2,291	0	1,122
_/2 May 2019 - forecast\	41,526	(619)	87	2,221	0	1,689
_/2 June 2019 - forecast	\$41,839	(\$1,811)	\$61	\$2,063	\$0	\$313

Duke Energy Progress
(Over) / Under Recovery of Fuel Costs
September 2018

Schedule 4
Page 3 of 3

Line No.			Residential	Commercial	Industrial	Total
Distributed Energy Resource Program component of recovery: incremental costs						
44	Incurred S.C. DERP incremental expense	Input	\$141,683	\$56,227	\$41,769	\$239,679
45	Billed S.C. DERP incremental rates by account (\$/account)	Input	0.72	1.26	99.55	
46	Billed S.C. DERP incremental revenue	Input	\$94,610	\$38,782	\$24,005	\$157,397
47	S.C. DERP incremental (over)/under recovery [See footnote]	L44 - L46	\$47,073	\$17,445	\$17,764	\$82,282
48	Adjustment	Input				
49	Total S.C. DERP incremental (over)/under recovery [See footnote]	L47 + L48	\$47,073	\$17,445	\$17,764	\$82,282

Year 2018-2019

Cumulative (over) / under recovery

Balance ending February 2018

March 2018 - actual

April 2018 - actual

May 2018 - actual

June 2018 - actual

July 2018 - actual

August 2018 - actual

September 2018 - actual

_/2 October 2018 - forecast

_/2 November 2018 - forecast

_/2 December 2018 - forecast

_/2 January 2019 - forecast

_/2 February 2019 - forecast

_/2 March 2019 - forecast

_/2 April 2019 - forecast

_/2 May 2019 - forecast

_/2 June 2019 - forecast

Cumulative	Total
(\$448,552)	
(541,339)	(\$92,787)
(634,011)	(92,672)
(707,644)	(73,633)
(702,927)	4,717
(661,166)	41,761
(600,348)	60,818
(518,066)	82,282
(428,198)	89,868
(334,650)	93,548
(238,612)	96,038
(125,803)	112,809
(6,325)	119,478
129,154	135,479
277,867	148,713
433,649	155,782
\$597,381	\$163,732

Notes:

Detail amounts may not recalculate due to percentages presented as rounded.

Presentation of over or under collected amounts reflects a regulatory asset or liability. Over collections, or regulatory liabilities, are shown as negative amounts.

Under collections, or regulatory assets, are shown as positive amounts.

_/1 Total residential billed fuel rate is a composite rate reflecting the approved residential rate of 2.384 and RECD 5% discount.

_/2 Forecast amounts based on low end of range of expected fuel rates.

**Duke Energy Progress
Fuel and Fuel Related Cost Report
September 2018**

**Schedule 5
Page 1 of 2**

Description	Weatherspoon CT	Lee CC	Sutton CC/CT	Robinson Nuclear	Asheville Steam	Asheville CT	Roxboro Steam	Mayo Steam
Cost of Fuel Purchased (\$)								
Coal	-	-	-	-	\$2,885,444	-	\$25,426,657	\$1,072,135
Oil	224,578	-	-	8,830	-	-	150,260	115,840
Gas - CC	-	16,330,571	9,210,201	-	-	-	-	-
Gas - CT	24	-	596,222	-	-	60,832	-	-
Biogas	-	-	-	-	-	-	-	-
Total	224,602	\$16,330,571	\$9,806,423	8,830	\$2,885,444	\$60,832	\$25,576,917	\$1,187,975
Average Cost of Fuel Purchased (¢/MBTU)								
Coal	-	-	-	-	330.27	-	330.14	343.04
Oil	1,685.77	-	-	-	-	-	1,617.61	1,614.72
Gas - CC	-	381.98	497.03	-	-	-	-	-
Gas - CT	-	-	436.72	-	-	55,809.17	-	-
Biogas	-	-	-	-	-	-	-	-
Weighted Average	1,685.95	381.98	492.89	-	330.27	55,809.17	331.69	371.57
Cost of Fuel Burned (\$)								
Coal	-	-	-	-	\$5,059,833	-	\$17,023,708	\$2,267,786
Oil - CC	-	-	-	-	-	-	-	-
Oil - Steam/CT	79,454	-	-	-	41,771	-	187,707	66,426
Gas - CC	-	16,330,571	9,210,201	-	-	-	-	-
Gas - CT	24	-	596,222	-	-	60,832	-	-
Biogas	-	-	-	-	-	-	-	-
Nuclear	-	-	-	2,810,034	-	-	-	-
Total	\$79,478	\$16,330,571	\$9,806,423	\$2,810,034	\$5,101,604	\$60,832	\$17,211,415	\$2,334,212
Average Cost of Fuel Burned (¢/MBTU)								
Coal	-	-	-	-	323.69	-	328.64	324.80
Oil - CC	-	-	-	-	-	-	-	-
Oil - Steam/CT	1,594.82	-	-	-	1,584.03	-	1,584.29	1,560.76
Gas - CC	-	381.98	497.03	-	-	-	-	-
Gas - CT	-	-	436.72	-	-	55,809.17	-	-
Biogas	-	-	-	-	-	-	-	-
Nuclear	-	-	-	69.31	-	-	-	-
Weighted Average	1,595.30	381.98	492.89	69.31	325.81	55,809.17	331.51	332.29
Average Cost of Generation (¢/kWh)								
Coal	-	-	-	-	3.96	-	3.48	4.63
Oil - CC	-	-	-	-	-	-	-	-
Oil - Steam/CT	155.79	-	-	-	19.35	-	15.95	22.25
Gas - CC	-	2.83	3.80	-	-	-	-	-
Gas - CT	-	-	4.38	-	-	-	-	-
Biogas	-	-	-	-	-	-	-	-
Nuclear	-	-	-	0.76	-	-	-	-
Weighted Average	155.84	2.83	3.83	0.76	3.98	-	3.51	4.74
Burned MBTU's								
Coal	-	-	-	-	1,563,170	-	5,180,010	698,215
Oil - CC	-	-	-	-	-	-	-	-
Oil - Steam/CT	4,982	-	-	-	2,637	-	11,848	4,256
Gas - CC	-	4,275,207	1,853,040	-	-	-	-	-
Gas - CT	-	-	136,523	-	-	109	-	-
Biogas	-	-	-	-	-	-	-	-
Nuclear	-	-	-	4,054,013	-	-	-	-
Total	4,982	4,275,207	1,989,563	4,054,013	1,565,807	109	5,191,858	702,471
Net Generation (MWh)								
Coal	-	-	-	-	127,848	-	489,837	48,978
Oil - CC	-	-	-	-	-	-	-	-
Oil - Steam/CT	51	-	-	-	216	-	1,177	299
Gas - CC	-	576,605	242,163	-	-	-	-	-
Gas - CT	-	-	13,600	-	-	(18)	-	-
Biogas	-	-	-	-	-	-	-	-
Nuclear	-	-	-	371,425	-	-	-	-
Hydro (Total System)								
Solar (Total System)								
Total	51	576,605	255,763	371,425	128,064	(18)	491,014	49,277
Cost of Reagents Consumed (\$)								
Ammonia	-	-	-	-	-	-	\$96,114	-
Limestone	-	-	-	-	242,193	-	577,942	106,044
Re-emission Chemical	-	-	-	-	-	-	63,945	-
Sorbents	-	-	-	-	9,016	-	162,514	35,849
Urea	-	-	-	-	129,183	-	-	-
Total	-	-	-	-	\$380,391	-	\$900,515	\$141,893

Notes:
 Detail amounts may not add to totals shown due to rounding.
 Schedule excludes in-transit, terminal and tolling agreement activity.
 Cents/MBTU and cents/kWh are not computed when costs and/or net generation is negative.
 Lee and Wayne oil burn is associated with inventory consumption shown on Schedule 6 for Wayne.

Duke Energy Progress
Fuel and Fuel Related Cost Report
September 2018

Schedule 5
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Description	Brunswick Nuclear	Blewett CT	Wayne County CT	Darlington CT	Smith Energy Complex CC/CT	Harris Nuclear	Current Month	Total 12 ME September 2018
Cost of Fuel Purchased (\$)								
Coal	-	-	-	-	-	-	\$29,384,236	\$264,976,480
Oil	-	-	145,167	-	-	-	644,675	77,803,192
Gas - CC	-	-	-	-	19,605,802	-	45,146,574	668,513,621
Gas - CT	-	-	3,467,719	1,386,653	12,630,430	-	18,141,880	152,210,486
Biogas	-	-	-	-	33,386	-	33,386	332,720
Total	-	-	\$3,612,886	\$1,386,653	\$32,236,232	-	\$93,350,751	\$1,163,836,499
Average Cost of Fuel Purchased (¢/MBTU)								
Coal	-	-	-	-	-	-	330.60	323.94
Oil	-	-	1,682.12	-	-	-	1,678.19	1,692.29
Gas - CC	-	-	-	-	338.09	-	378.52	452.73
Gas - CT	-	-	367.01	355.79	338.74	-	348.89	413.86
Biogas	-	-	-	-	2,954.51	-	2,954.51	2,926.30
Weighted Average	-	-	378.91	355.79	338.65	-	358.29	429.70
Cost of Fuel Burned (\$)								
Coal	-	-	-	-	-	-	\$24,351,327	\$300,602,492
Oil - CC	-	-	-	-	281	-	281	45,042
Oil - Steam/CT	-	9,162	130,986	-	-	-	515,506	78,167,892
Gas - CC	-	-	-	-	19,605,802	-	45,146,574	668,513,621
Gas - CT	-	-	3,467,719	1,386,653	12,630,430	-	18,141,880	152,210,486
Biogas	-	-	-	-	33,386	-	33,386	332,720
Nuclear	5,955,688	-	-	-	-	4,702,982	13,468,704	193,172,622
Total	\$5,955,688	\$9,162	\$3,598,705	\$1,386,653	32,269,899.00	\$4,702,982	\$101,657,658	\$1,393,044,875
Average Cost of Fuel Burned (¢/MBTU)								
Coal	-	-	-	-	-	-	327.24	320.27
Oil - CC	-	-	-	-	1,652.94	-	1,652.94	1,825.04
Oil - Steam/CT	-	1,668.86	1,742.07	-	-	-	1,621.55	1,664.39
Gas - CC	-	-	-	-	338.09	-	378.52	452.73
Gas - CT	-	-	367.01	355.79	338.74	-	348.89	413.86
Biogas	-	-	-	-	2,954.51	-	2,954.51	2,926.30
Nuclear	61.03	-	-	-	-	64.95	63.97	64.50
Weighted Average	61.03	1,668.86	377.87	355.79	338.66	64.95	222.67	239.15
Average Cost of Generation (¢/kWh)								
Coal	-	-	-	-	-	-	3.65	3.52
Oil - CC	-	-	-	-	14.05	-	14.05	20.28
Oil - Steam/CT	-	916.20	19.85	-	-	-	23.38	20.67
Gas - CC	-	-	-	-	2.57	-	2.86	3.35
Gas - CT	-	-	4.17	4.50	3.34	-	3.59	4.05
Biogas	-	-	-	-	21.36	-	21.36	22.09
Nuclear	0.66	-	-	-	-	0.67	0.68	0.68
Weighted Average	0.66	916.20	4.29	4.53	2.83	0.67	2.12	2.25
Burned MBTU's								
Coal	-	-	-	-	-	-	7,441,395	93,857,729
Oil - CC	-	-	-	-	17	-	17	2,468
Oil - Steam/CT	-	549	7,519	-	-	-	31,791	4,696,495
Gas - CC	-	-	-	-	5,798,980	-	11,927,227	147,661,745
Gas - CT	-	-	944,854	389,742	3,728,693	-	5,199,921	36,778,217
Biogas	-	-	-	-	1,130	-	1,130	11,370
Nuclear	9,758,192	-	-	-	-	7,241,284	21,053,489	299,496,187
Total	9,758,192	549	952,373	389,742	9,528,820	7,241,284	45,654,970	582,504,211
Net Generation (mWh)								
Coal	-	-	-	-	-	-	666,663	8,539,389
Oil - CC	-	-	-	-	2	-	2	222
Oil - Steam/CT	-	1	660	(198)	-	-	2,205	378,163
Gas - CC	-	-	-	-	762,367	-	1,581,135	19,956,864
Gas - CT	-	-	83,178	30,802	377,891	-	505,453	3,761,568
Biogas	-	-	-	-	156	-	156	1,506
Nuclear	906,920	-	-	-	-	701,214	1,979,559	28,444,034
Hydro (Total System)							50,168	692,297
Solar (Total System)							16,687	241,237
Total	906,920	1	83,838	30,604	1,140,417	701,214	4,802,030	62,015,281
Cost of Reagents Consumed (\$)								
Ammonia	-	-	-	-	\$23,471	-	\$119,585	\$1,823,686
Limestone	-	-	-	-	-	-	926,179	10,196,057
Re-emission Chemical	-	-	-	-	-	-	63,945	206,222
Sorbents	-	-	-	-	-	-	207,378	2,883,156
Urea	-	-	-	-	-	-	129,183	1,010,231
Total	-	-	-	-	\$23,471	-	\$1,446,270	\$16,119,351

Duke Energy Progress
Fuel & Fuel-related Consumption and Inventory Report
September 2018

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Description	Weatherspoon	Lee	Sutton	Robinson	Asheville
Coal Data:					
Beginning balance	-	-	-	-	115,103
Tons received during period	-	-	-	-	35,573
Inventory adjustments	-	-	-	-	-
Tons burned during period	-	-	-	-	63,647
Ending balance	-	-	-	-	87,029
MBTUs per ton burned	-	-	-	-	24.56
Cost of ending inventory (\$/ton)	-	-	-	-	79.50
Oil Data:					
Beginning balance	572,396	-	2,632,614	78,040	2,476,762
Gallons received during period	96,538	-	-	-	-
Miscellaneous use and adjustments	(107)	-	-	-	(4,068)
Gallons burned during period	35,595	-	-	-	19,181
Ending balance	633,232	-	2,632,614	78,040	2,453,513
Cost of ending inventory (\$/gal)	2.23	-	2.80	2.44	2.18
Natural Gas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	-	4,144,900	1,939,017	-	106
MCF burned during period	-	4,144,900	1,939,017	-	106
Ending balance	-	-	-	-	-
Biogas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	-	-	-	-	-
MCF burned during period	-	-	-	-	-
Ending balance	-	-	-	-	-
Limestone/Lime Data:					
Beginning balance	-	-	-	-	12,755
Tons received during period	-	-	-	-	472
Inventory adjustments	-	-	-	-	-
Tons consumed during period	-	-	-	-	4,010
Ending balance	-	-	-	-	9,217
Cost of ending inventory (\$/ton)	-	-	-	-	59.16

Notes:

Detail amounts may not add to totals shown due to rounding.

Schedule excludes in-transit, terminal and tolling agreement activity.

Gas is burned as received; therefore, inventory balances are not maintained.

The oil inventory data for Wayne reflects the common usage of the oil tank used for both Wayne and Lee units.

Duke Energy Progress
Fuel & Fuel-related Consumption and Inventory Report
September 2018

Schedule 6
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Description	Roxboro	Mayo	Brunswick	Blewett	Wayne County
Coal Data:					
Beginning balance	700,143	214,019	-	-	-
Tons received during period	306,553	12,707	-	-	-
Inventory adjustments	-	-	-	-	-
Tons burned during period	205,931	28,187	-	-	-
Ending balance	800,765	198,539	-	-	-
MBTUs per ton burned	25.15	24.77	-	-	-
Cost of ending inventory (\$/ton)	82.65	80.46	-	-	-
Oil Data:					
Beginning balance	203,763	251,507	168,863	685,977	11,652,560
Gallons received during period	67,312	51,984	-	-	62,537
Miscellaneous use and adjustments	(7,422)	(2,450)	-	-	-
Gallons burned during period	85,709	30,963	5,856	3,910	54,631
Ending balance	177,944	270,078	163,007	682,067	11,660,466
Cost of ending inventory (\$/gal)	2.19	2.15	2.44	2.34	2.40
Natural Gas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	-	-	-	-	913,620
MCF burned during period	-	-	-	-	913,620
Ending balance	-	-	-	-	-
Biogas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	-	-	-	-	-
MCF burned during period	-	-	-	-	-
Ending balance	-	-	-	-	-
Limestone/Lime Data:					
Beginning balance	74,706	18,634	-	-	-
Tons received during period	14,305	48	-	-	-
Inventory adjustments	70	-	-	-	-
Tons consumed during period	12,514	1,972	-	-	-
Ending balance	76,567	16,710	-	-	-
Cost of ending inventory (\$/ton)	44.06	52.46	-	-	-

Duke Energy Progress
Fuel & Fuel-related Consumption and Inventory Report
September 2018

Schedule 6
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Description	Darlington	Smith Energy Complex	Harris	Current Month	Total 12 ME September 2018
Coal Data:					
Beginning balance	-	-	-	1,029,265	1,547,108
Tons received during period	-	-	-	354,833	3,240,397
Inventory adjustments	-	-	-	-	24,990
Tons burned during period	-	-	-	297,765	3,726,162
Ending balance	-	-	-	1,086,333	1,086,333
MBTUs per ton burned	-	-	-	24.99	25.19
Cost of ending inventory (\$/ton)	-	-	-	82.00	82.00
Oil Data:					
Beginning balance	9,991,385	8,279,889	302,087	37,295,843	38,351,702
Gallons received during period	-	-	-	278,371	33,315,265
Miscellaneous use and adjustments	-	-	-	(14,047)	(182,644)
Gallons burned during period	-	121	-	235,966	34,160,122
Ending balance	9,991,385	8,279,768	302,087	37,324,201	37,324,201
Cost of ending inventory (\$/gal)	2.39	2.33	2.44	2.39	2.39
Natural Gas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	380,874	9,259,493	-	16,638,010	179,331,412
MCF burned during period	380,874	9,259,493	-	16,638,010	179,331,412
Ending balance	-	-	-	-	-
Biogas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	-	1,098	-	1,098	11,099
MCF burned during period	-	1,098	-	1,098	11,099
Ending balance	-	-	-	-	-
Limestone/Lime Data:					
Beginning balance	-	-	-	106,095	123,363
Tons received during period	-	-	-	14,825	202,479
Inventory adjustments	-	-	-	70	14,719
Tons consumed during period	-	-	-	18,496	238,067
Ending balance	-	-	-	102,494	102,494
Cost of ending inventory (\$/ton)	-	-	-	46.79	46.79

Schedule 7

**DUKE ENERGY PROGRESS
ANALYSIS OF COAL PURCHASED
SEPTEMBER 2018**

STATION	TYPE	QUANTITY OF TONS DELIVERED	DELIVERED COST	DELIVERED COST PER TON
ASHEVILLE	SPOT	11,227	\$ 954,374	\$ 85.01
	CONTRACT	24,346	1,875,967	77.05
	ADJUSTMENTS	-	55,104	-
	TOTAL	35,573	2,885,444	81.11
MAYO	SPOT	-	-	-
	CONTRACT	12,707	1,013,008	79.72
	ADJUSTMENTS	-	59,127	-
	TOTAL	12,707	1,072,135	84.37
ROXBORO	SPOT	63,540	5,426,476	85.40
	CONTRACT	243,013	19,662,476	80.91
	ADJUSTMENTS	-	337,705	-
	TOTAL	306,553	25,426,657	82.94
ALL PLANTS	SPOT	74,767	6,380,849	85.34
	CONTRACT	280,066	22,551,451	80.52
	ADJUSTMENTS	-	451,936	-
	TOTAL	354,833	\$ 29,384,236	\$ 82.81

Schedule 8

**DUKE ENERGY PROGRESS
ANALYSIS OF COAL QUALITY RECEIVED
SEPTEMBER 2018**

STATION	PERCENT MOISTURE	PERCENT ASH	HEAT VALUE	PERCENT SULFUR
ASHEVILLE	6.50	11.64	12,280	1.81
MAYO	8.54	8.78	12,298	2.95
ROXBORO	7.04	9.04	12,562	1.97

Schedule 9

**DUKE ENERGY PROGRESS
ANALYSIS OF OIL PURCHASED
SEPTEMBER 2018**

	MAYO	ROXBORO	WAYNE	WEATHERSPOON
VENDOR	Greensboro Tank Farm	Greensboro Tank Farm and Indigo	Indigo	Petroleum Traders
SPOT/CONTRACT	Contract	Contract	Contract	Contract
SULFUR CONTENT %	0	0	0	0
GALLONS RECEIVED	51,984	67,312	62,537	96,538
TOTAL DELIVERED COST	\$ 115,840	\$ 150,260	\$ 145,167	\$ 224,578
DELIVERED COST/GALLON	\$ 2.23	\$ 2.23	\$ 2.32	\$ 2.33
BTU/GALLON	138,000	138,000	138,000	138,000

Notes:

Price adjustment of \$8,830 for the Robinson station is excluded.

Duke Energy Progress
Power Plant Performance Data
Twelve Month Summary
October, 2017 - September, 2018
Nuclear Units

<u>Unit Name</u>	<u>Net Generation (mWh)</u>	<u>Capacity Rating (mW)</u>	<u>Capacity Factor (%)</u>	<u>Equivalent Availability (%)</u>
Brunswick 1	7,071,990	938	86.07	89.02
Brunswick 2	7,588,647	932	92.95	95.56
Harris 1	7,364,552	931	90.30	87.24
Robinson 2	6,418,845	741	98.89	95.23

**Duke Energy Progress
Power Plant Performance Data
Twelve Month Summary
October, 2017 through September, 2018
Combined Cycle Units**

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Lee Energy Complex	1A	1,432,250	225	72.83	80.46
Lee Energy Complex	1B	1,438,083	226	72.72	80.64
Lee Energy Complex	1C	1,485,134	227	74.77	81.85
Lee Energy Complex	ST1	2,857,440	379	86.07	93.46
Lee Energy Complex	Block Total	7,212,907	1,056	77.97	85.44
Richmond County CC	7	1,242,497	189	75.05	82.30
Richmond County CC	8	1,235,874	189	74.65	81.90
Richmond County CC	ST4	1,388,744	175	90.59	90.40
Richmond County CC	9	1,409,203	216	74.65	79.48
Richmond County CC	10	1,429,083	216	75.70	80.56
Richmond County CC	ST5	1,875,818	248	86.34	90.29
Richmond County CC	Block Total	8,581,219	1,232	79.51	84.20
Sutton Energy Complex	1A	1,291,947	224	65.77	72.95
Sutton Energy Complex	1B	1,312,551	224	66.82	73.59
Sutton Energy Complex	ST1	1,559,969	270	65.96	80.09
Sutton Energy Complex	Block Total	4,164,467	719	66.17	75.83

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress
Power Plant Performance Data
Twelve Month Summary
October, 2017 through September, 2018**

Intermediate Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Mayo 1	1,502,917	746	23.00	84.32
Roxboro 2	1,848,346	673	31.35	78.61
Roxboro 3	1,833,144	698	29.98	72.11
Roxboro 4	1,579,673	711	25.36	52.05

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress
Power Plant Performance Data
Twelve Month Summary
October, 2017 through September, 2018
Other Cycling Steam Units**

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Operating Availability (%)
Asheville 1	625,457	192	37.19	87.21
Asheville 2	490,437	192	29.16	87.54
Roxboro 1	723,649	380	21.74	82.04

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress
Power Plant Performance Data
Twelve Month Summary
October, 2017 through September, 2018
Combustion Turbine Stations**

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Asheville CT	514,865	370	85.83
Blewett CT	240	68	92.78
Darlington CT	197,291	862	71.53
Richmond County CT	2,764,154	930	81.42
Sutton Fast Start CT	229,115	96	89.93
Wayne County CT	368,113	962	96.71
Weatherspoon CT	1,718	164	94.63

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress
Power Plant Performance Data**

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**Twelve Month Summary
October, 2017 through September, 2018
Hydroelectric Stations**

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Blewett	102,236	27.0	90.34
Marshall	1,509	4.0	11.57
Tillery	163,461	84.0	94.58
Walters	425,091	113.0	97.26

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.